

CONVOY CALCULATIONS AND FORMS



**UMODB02
TBOLC 500-500-05
MWOBC 882X1B05)**

References

- FM 4-01.011, *Unit Movement Operations* ,Appendix C
- FM 55-30, *Army Motor Transport Units and Operations*, Appendix J
- FORSCOM/ARNG Regulation 55-1, *Unit Movement Planning*, Chapter 7
- TB 55 - 46 - 1, *Standard Characteristics for Transportability of Military Vehicles and Other Outsize/Overweight Equipment*, Chapter 3



Scope of Lesson

- Terminology
- Formulas
 - Time Distance
 - Density
 - Pass Time
- Scenarios
 - DD Form 1265 (Request for Convoy Clearance)
 - DD Form 1266 (Request for Special Hauling Permit)
- PE



Convoy Operations and the UMO

- Once given certain information about the convoy movement (start times, end times, rest halts & locations), the UMO:
 - Prepares a Road Movement Table
 - Prepares DD Forms 1265 & 1266
- The UMO should know the basic terms and formulas that are used in convoy planning and be able to compile/check DD Forms 1265 and 1266

Terminology

- **Distance (D):** How far a march column travels expressed in miles or kilometers
- **Time (T):** How long it takes to complete a move, including halts
- **Rate (R):** Kilometers or miles traveled in an hour (speed)

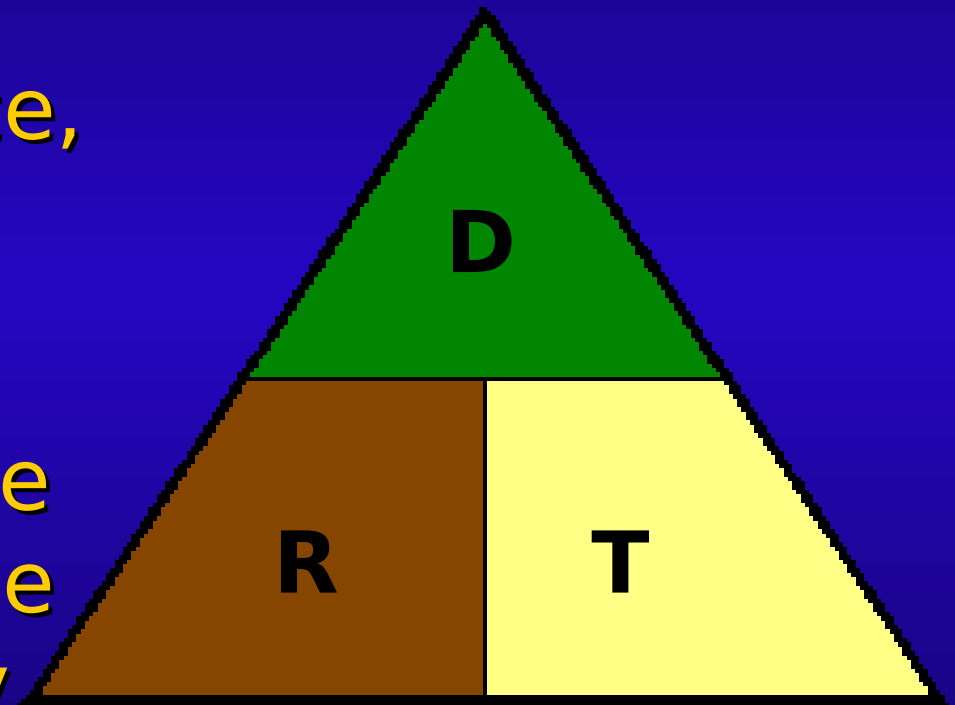
Distance, Rate & Time

- The three basic math

factors are: Distance,

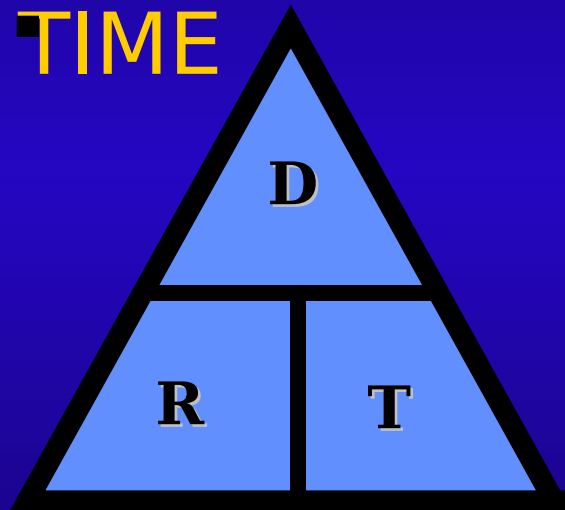
Rate & Time

- When two of the three factors are known, the third can be found by a simple math equation



Time Distance Calculations

$$\text{DISTANCE} = \text{RATE} \times$$



$$\text{RATE} = \frac{\text{DISTANCE}}{\text{TIME}}$$

$$\text{TIME} =$$

$$\frac{\text{DISTANCE}}{\text{RATE}}$$

Time Distance

**RELEASE POINT
FT STORY**

**START POINT
FT EUSTIS**

45 MPH



(45 MPH)

Time Distance Formula

- Time Distance:
 - The time required for a vehicle to move from one point to another at a given rate of march (Move from SP to CP1)

$$\frac{\text{Distance (miles)} \times 60}{\text{Rate (mph)}} = \text{TIME (minutes)}$$

$$\frac{11 \text{ (miles)} \times 60}{40 \text{ (mph)}} =$$

$$660 \div 40 = 16.5 \text{ minutes} = 17 \text{ minutes}$$

(Always round

D, R & T & DD Form 1265

- Computation of the time it will take to arrive and depart a particular point is crucial
- Computation results in ETAs and ETDs of march column at state lines, major road junctions, bridges, tunnels, checkpoints & other critical points
- Must determine “Density” and “Pass Time”

Density



1 Mile

Density Formula

- Density is the number of vehicles, with an constant vehicle gap, in a mile

$$\text{Density} = \frac{1760 \text{ yards (1 mile)}}{\text{Vehicle gap in yards} + \text{average vehicle length in yards}}$$

AVG. VEHICLE GAP = 100 YDS

AVG. VEHICLE LENGTH = 10 YDS

$$\frac{1,760}{100+10} = 16\text{VPM}$$

Always ROUND: eg 16.1 = 16 VPM, 16.5 = 17 VPM

Density Calculations

- Calculating the Average Vehicle Length:
- Step 1: Use TB 55-46-1 to find the length of vehicles. Note that all vehicle lengths are given in inches (note vehicle unions)
- Step 2: Add all vehicle lengths together
- Step 3: Divide by the number of vehicles
- Step 4: Divide the average length (given in inches) by 36 (36 inches in a yard).
- Answer = Average vehicle length in yards

Density Calculations (cont)

- Calculating the Average Vehicle Length:
- Use the TB 55-46-1 to find the following vehicle lengths

Vehicle
Length

Length

Vehicle

M915/ M131A4C

M 929A2

M35A2C /M149

M 931A2

M931/M871

M998

M984A1 WVN

M923A2

Density Calculations (cont)

- Step 4: Find the average vehicle length (given in inches) by 36 (36 inches in a yard)

$$\frac{\text{_____}}{36} = \text{_____ yards}$$

The average vehicle length for this convoy is therefore _____yards.

Density Formula

- Next add the average vehicle length in yards to the vehicle gap in yards and divide 1760 by that number.

$$\text{Density} = \frac{1760 \text{ yards (1 mile)}}{\text{Vehicle gap in yards} + \text{average vehicle length in yards}}$$

AVG. VEHICLE GAP = 100 YDS

$$\frac{1,760}{100 + \text{AVG. VEHICLE LENGTH}} = 16\text{VPM}$$

AVG. VEHICLE LENGTH = _____ YDS

$$100 + \text{AVG. VEHICLE LENGTH}$$

Pass Time

A GIVEN POINT



THE FIVE MAIN TYPES OF TRUCKS

Pass Time

- **Pass Time:** The length of time required for a convoy (or a subgroup) to pass a given point on the route
- Knowing how to compute pass time is essential to a planner who must calculate a
- convoy's ETD from a checkpoint
- Don't forget to include the time gaps (time interval between elements of a convoy as they pass a given point) when calculating the pass time

Pass Time Formula

- Pass Time / Time Length:
 - Length of time it takes for the entire march column to pass a given point

$$\text{Pass Time (in mins)} = \frac{\text{Number of Vehicles X 60}}{\text{Density X Rate}} + \text{Time Gaps or Extra Time}$$

Pass Time Calculation

- Pass Time / Time Length:

$$\text{Pass Time (in min)} = \frac{\text{Number of vehicles} \times \frac{60}{\text{Rate}} \times \text{Density}}{\text{Rate}}$$

$$\frac{10 \times 60}{16 \times 45} = \frac{600}{720} = 0.8\bar{3}$$

= 1 minutes (always round up)

Time Gaps



A MARCH COLUMN - NO TIME GAP



TIME GAP

EG: 10 MIN



MARCH COLUMN DIVIDED INTO TWO ELEMENTS - ONE TIME GAP (EG 10 MIN)



TIME GAP

EG: 10 MIN



TIME GAP

EG: 10 MIN



MARCH COLUMN DIVIDED INTO THREE ELEMENTS - TWO TIME GAPS (EG 10 MIN)

Pass Time Calculations (cont)

① + 0 FOR THE TIME

$$\begin{array}{l} \text{GAP} \\ \hline 10 \times 60 \\ 16 \times 45 \end{array} = \frac{600}{720} = 0.8 = 1 \text{ mins} + 0 = 1$$

3 (always round up) (time gap) (Mins)

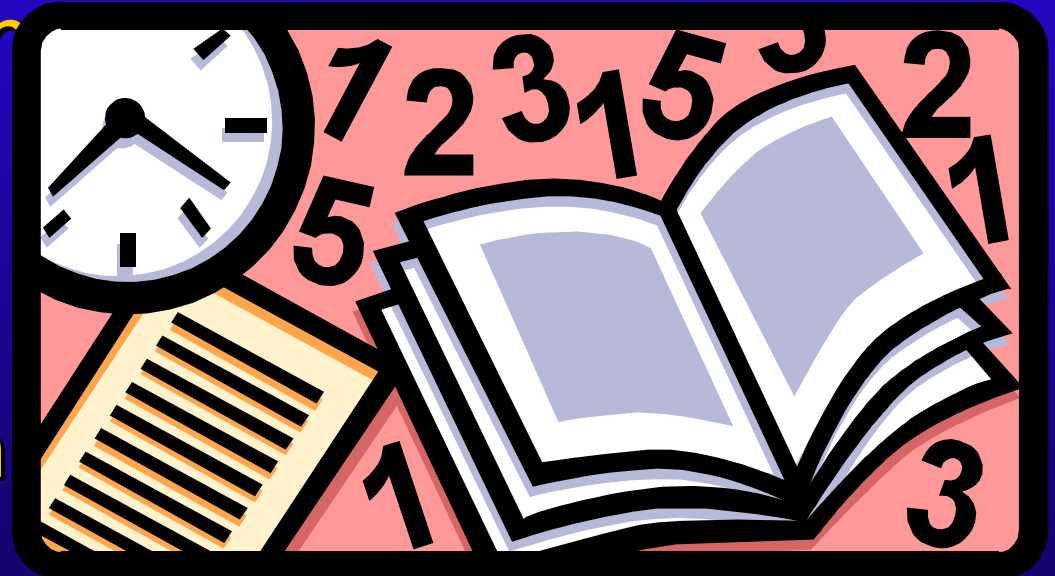
□ + 20 MIN FOR THE TIME GAP

$$\begin{array}{l} 10 \times 60 \\ 16 \times 45 \end{array} = \frac{600}{720} = 0.8 = 1 \text{ mins} + 2 = 21$$

3 (always round up) (time gap) (Mins)

SUMMARY

- Simple convoy calculations involving the three basic factors or distance, rate and time
- Time Distance formula
- Density formula
- Pass Time formula
- Time gaps





On
Learnin
g

DD Form 1265 & DD Form 1266

DD Form 1265

Request for Convoy Clearance

- DD Form 1265 is the form completed by the UMO to request convoy clearance
- No convoy movement is permitted over public highways without a Convoy Clearance Number (CCN)

DD Form 1265

DD FORM 1265, SEP 1998 (EG) PREVIOUS EDITION IS OBSOLETE. Designed using Perform Pro, WHS/DIOR, Sep 98

DD FORM 1265 (BACK), SEP 1998

DD Form 1265 (Cont)

REQUEST FOR CONVOY CLEARANCE	1. CONVOY NUMBER	2. UIC	3. DATE(YYYYMMDD)
		WFSPAA	2001/08/18
SECTION I - GENERAL			

Block 1: Convoy Number (leave blank -
the ITO may enter the CCN once

Block 2: Known)

Block 3: Date form prepared

DD Form 1265 (Cont)

SECTION I - GENERAL		
4. ORGANIZATION	5. STATION	6. CONVOY COMMANDER
316th Trans Co (Lt/Mdm Trk)	Bldg 1234, Fort Story, VA 23459	John J. Jones 2LT
7. PERSONNEL REFERENCE	8. POINT OF ORIGIN	9. DESTINATION

Block 4: Organization

Block 5: Station

Block 6: Convoy Commander

DD Form 1265 (Cont)

7. PERSONNEL STRENGTH		8. POINT OF ORIGIN	9. DESTINATION
a. OFFICER 1	b. ENLISTED 47	Fort Story, VA	Port of Charleston, SC
a. DEPARTURE		b. ARRIVAL	11. RATE OF MARCH

Block 7: Personnel Strength

a. Officer b. Enlisted

Block 8: Point of Origin (SP) - include

Block 9: city and state
Destination (RP) - include city
and state

Ref: FORSCOM/ARNG Reg 55-1, pg.58

DD Form 1265 (Cont)

10. DATE AND TIME	a. DEPARTURE 08/28/01 0700	b. ARRIVAL 08/28/01 1641	11. RATE OF MARCH 45 MPH, 50 max catch-up
SECTION II - CONVOY COMPOSITION			
12. NUMBER OF EACH TYPE OF VEHICLE AND DESCRIPTION <i>(Include towed equipment)</i>			

Block 10: Date & Time

- a. Departure (first vehicle crosses SP)
- b. Arrival (last vehicle crosses RP)

Block 11: Rate of March - convoy and max (catch-up)

DD Form 1265 (Cont)

SECTION II - CONVOY COMPOSITION

12. NUMBER OF EACH TYPE OF VEHICLE AND DESCRIPTION *(Include towed equipment)*

19 ea M923 Trk Cgo D/S 5 Ton

2 ea M998 Trk Util Cgo/Tpr Carr

1 ea M96A2 Truck Tractor 6x6 towing 1 ea M870A1 Stlr Low Bed 40 T

List of vehicles by type and model number. Include total number of each type and match vehicles with their assigned trailers.

13. TOTAL NUMBER	14. NUMBER OF	15a. NO. OF SERIALS	b. TIME INTERVAL	16a. NO. OF MARCH	b. TIME INTERVAL
------------------	---------------	---------------------	------------------	-------------------	------------------

Block 12: Number of Each Type of
Vehicle & Description

DD Form 1265 (Cont)

13. TOTAL NUMBER OF VEHICLES 22	14. NUMBER OF OVERSIZE/OVERWEIGHT VEHICLES 1	15a. NO. OF SERIALS NA	b. TIME INTERVAL NA	16a. NO. OF MARCH UNITS	b. TIME INTERVAL
SECTION III - ROUTE DATA					
17. PROPOSED ROUTING (Indicate US Routes, State Routes, etc.)					

Block 13: Total Number of Vehicles
(don't count trailers)

Block 14: Number of Oversize/Overweight
Vehicles

Blocks 15a/B: Mark "NA" - serials not
recognized

by MOBICON

DD Form 1265 (Cont)

13. TOTAL NUMBER OF VEHICLES	14. NUMBER OF OVERSIZE/ OVERWEIGHT VEHICLES	15a. NO. OF SERIALS	b. TIME INTERVAL	16a. NO. OF MARCH UNITS	b. TIME INTERVAL
22	1	NA	NA	3	10
SECTION III - ROUTE DATA					
17. PROPOSED ROUTING (Indicate US Routes, State Routes, etc.)					

Block 16a: No. of
March Units

b: Time Interval

DD Form 1265 (Cont)

SECTION III - ROUTE DATA

17. PROPOSED ROUTING *(Indicate US Routes, State Routes, etc.)*

Ft Story to I 264 W, US 58 W, I 95 S, I 26 E, US 17 S to Port of Charleston

List street/highway/road routing in order of use from Starting Point (SP) to Release Point ((RP).

18. ETA AND ESTIMATED TRAVEL TIMES, MAJOR ROAD JUNCTIONS, MAJOR BRIDGES AND TUNNELS, METROPOLITAN AREAS AND

Block 17: Proposed Routing (Indicate Inter-states ['I'], US Highways ['US'] and State Routes ['S'], etc.)

DD Form 1265

(Cont)

Block 18: List location of each halt and critical points (consider change in time zone)

18. ETA AND ETD AT STATE LINES, MAJOR ROAD JUNCTIONS, MAJOR BRIDGES AND TUNNELS, METROPOLITAN AREAS AND OVERNIGHT HALT SITES (Continue on a separate sheet if additional space is required)				
a. LOCATION	b. ETA	c. DATE (YYYYMMDD)	d. ETD	e. DATE (YYYYMMDD)
SP (I 264 W / US 58 W) [Fort Story]	0700	2001/08/28	0723	2001/08/28
CP1 (US 58 W / I 95 S [Emporia, VA])	0800		0828	
CP2 (I 95 S / VA - NC State Line)	1015		1038	
CP3 (I 95 S / US 421 [Dunn, NC])	1215		1338	
CP4 (I 95 S / NC - SC State Line)	1400		1423	
CP5 (I 95 S / I 26 E [Manning SC])	1600		1623	
RP (I 26 E / US 17 S [Charleston SC])	1618		1641	
SECTION IV - LOGISTICAL DATA				

a. Location b. ETA c. Date d. ETD e. Date

DD Form 1265 (Cont)

SECTION IV - LOGISTICAL DATA

19. BRIEF GENERAL DESCRIPTION OF CARGO *(Brief general description; i.e., organizational impediments, etc.) (Within security limitations)*

List general description of cargo.

Examples:

- Troops with or without weapons
- Any sensitive documents
- Tanker filled or empty
- Hazardous Cargo

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Block 19: Description of Load (a brief general description within security limitations)

Ref: FORSCOM/ARNG Reg 55-1, pg.58

DD Form 1265 -- Back

20. ARE EXPLOSIVES TO BE TRANSPORTED?		YES	<input checked="" type="checkbox"/> NO (If YES, describe below)
a. CLASS	b. AMOUNT	c. DESCRIPTION	d. VEHICLES TO BE USED
			(1) NO. (2) TYPE
		N/A	
21. STATEMENT WHY EXPLOSIVES CANNOT BE TRANSPORTED COMMERCIALY (Movements involving explosives and/or other dangerous articles are required to comply with all applicable regulations or directives)			

Block 20: Are explosives to be transported?

If no then mark box and place N/A in center

DD Form 1265 -- Back (Cont)

20. ARE EXPLOSIVES TO BE TRANSPORTED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO (If YES, describe below)				
a. CLASS	b. AMOUNT	c. DESCRIPTION	d. VEHICLES TO BE USED	
			(1) NO.	(2) TYPE
1.3C	60 lbs	Cartridges, for small arms, blank		
21. STATEMENT WHY EXPLOSIVES CANNOT BE TRANSPORTED COMMERCIALY (Movements involving explosives and/or other dangerous articles are required to comply with all applicable regulations or directives)				

Block 20: Are explosives to be transported?

If yes, describe:

Column b:

Amount

Column a:

Class

Column c:

Description

DD Form 1265 -- Back (Cont)

20. ARE EXPLOSIVES TO BE TRANSPORTED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO (If YES, describe below)			
a. CLASS	b. AMOUNT	c. DESCRIPTION	d. VEHICLES TO BE USED
			(1) NO. (2) TYPE
1.3C	60 lbs	Cartridges, for small arms, blank	1 1 1/2 ton Trk
21. STATEMENT WHY EXPLOSIVES CANNOT BE TRANSPORTED COMMERCIALY (Movements involving explosives and/or other dangerous articles are required to comply with all applicable regulations or directives)			
Time constraints do not allow commercial shipping			

Block 20: Column d: Vehicles to be used

Block 21: (1) No. (2) Type
Statement why explosives
cannot be transported
commercially

DD Form 1265 -- Back (Cont)

22. LOGISTICAL SUPPORT REQUIRED AT OVERNIGHT HALT SITES? <input type="checkbox"/> YES <input type="checkbox"/> NO						
<i>(If YES, complete the following) (Use separate sheet if additional space is required)</i>						
a. DATE (YYYYMMDD)	b. INSTALLATION	c. GAS (gals)	d. OIL (gals)	e. RATIONS	f. BILLETS	g. OTHER

Block 22: Logistical Support Required at Overnight Halt Sites? Yes or No

If yes, complete the following:

a: DATE (YYYYMMDD)
 b: Installation
 c: Gas (gals)
 d: Oil (gals)
 e: Rations
 f: Billets
 g: Other

DD Form 1265 -- Back (Cont)

Block 23: Remarks

23. REMARKS

This block is to be used to inform the chain of command of any unique convoy requirements.

- Planned location of fuel and meal halts.
- Types of radios
- Specific support requirements.
- List each oversized/over weight vehicle (truck or truck trailer combinations) with load description.

Note: Enter name, rank, telephone and fax number of convoy point of contact (POC) during normal duty hours.

24. REQUESTING AGENCY

25. APPROVING AGENCY

DD Form 1265 -- Back (Cont)

24. REQUESTING AGENCY 316th Trans Co		25. APPROVING AGENCY
26. REQUESTED BY		
a. NAME (Last, First, Middle Initial) Chestnut Charles C.		
b. GRADE 1LT	c. TITLE Unit Movement Officer	
d. SIGNATURE Charles C. Chestnut	e. DATE (YYYYMMDD) 2001/08/18	
INSTRUCTIONS: In cases where bona-fide emergencies exist, the		

Approved through
DMC (SMCC) in
convoy's state of
origin or ITO/ UMC

Block 24: Requesting Agency

Block 26: Requested By:

Name, Grade, Title, Signature, &
Date

Ref: FORSCOM/ARNG Reg 55-1, pg.58

Pass Time Calculations (cont)

① + 0 FOR THE TIME GAP

$$\frac{10 \times 60}{16 \times 45} = \frac{600}{720} = 0.8 = 1 \text{ mins} + 0 = 1$$

3 (always round up) (time gap) (Mins)

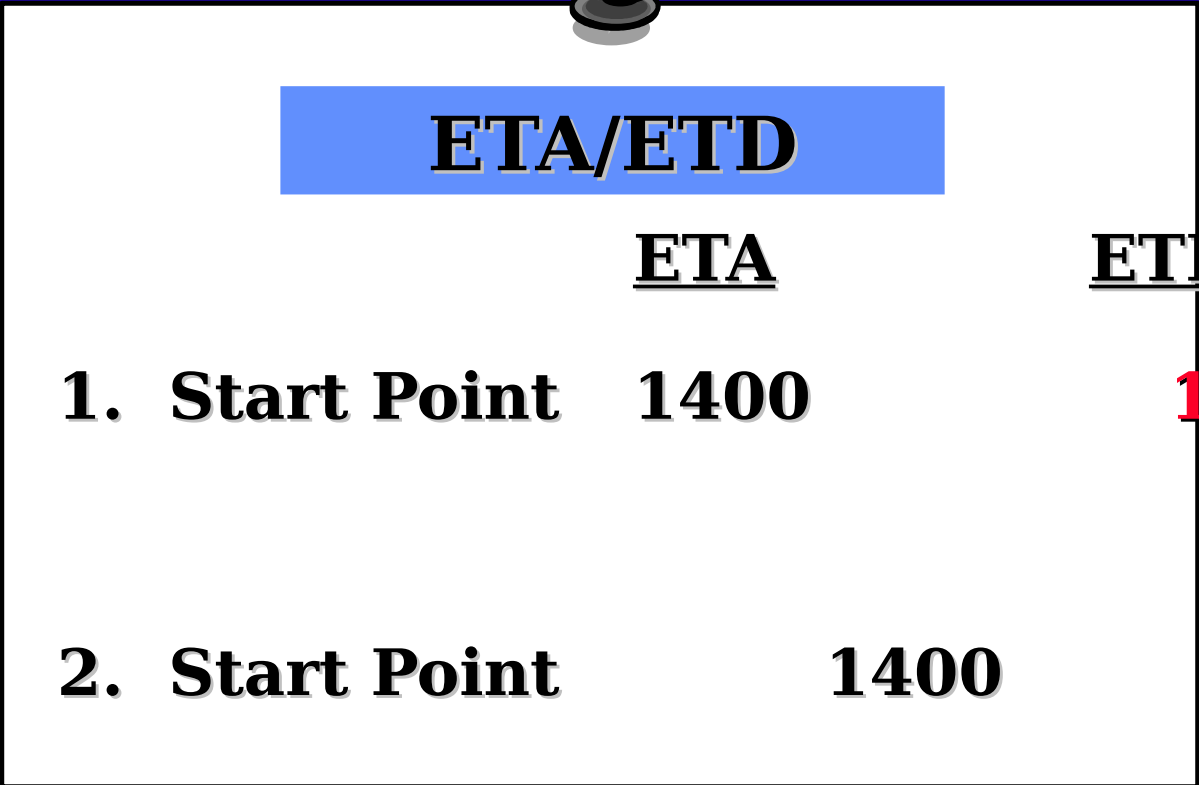
□ + 20 MIN FOR THE TIME GAP

$$\frac{10 \times 60}{16 \times 45} = \frac{600}{720} = 0.8 = 1 \text{ mins} + 2 = 21$$

3 (always round up) (time gap) (Mins)

ETA/ETD Example (cont)

Examples From The Previous Slide



	<u>ETA</u>	<u>ETD</u>
1. Start Point	1400	1401
2. Start Point	1400	1421

Convoy Calculations

Classroom Example

GIVEN

- Rate of March 45 mph
- SP to CP1 45 miles
- Break at CP1 15 minutes
- CP1 to RP 45 miles
- Pass Time 21 minutes
- Start time 10:00

$$\text{TIME DISTANCE} = \frac{\text{Distance (miles)} \times 60}{\text{Rate (mph)}}$$

$$\text{SP to CP1 (minutes)} \quad \frac{45 \times 60}{45} = \frac{2700}{45} = 60$$

$$\text{CP1 to RP (minutes)} \quad \frac{45 \times 60}{45} = \frac{2700}{45} = 60$$

Prepare Block 18 of DD Form 1265

18. ETA AND ETD AT STATE LINES, MAJOR ROAD JUNCTIONS, MAJOR BRIDGES AND TUNNELS, METROPOLITAN AREAS AND OVERNIGHT HALT SITES
(Continue on a separate sheet if additional space is required)

a. LOCATION	b. ETA	c. DATE	d. ETD	e. DATE
Start Point	1400			1421
CP1 (15 min halt)	1500		1536	
RP	1615		1636	

First vehicle in convo Last vehicle in convo

First Requirement: Convoy Calculations

GIVEN

- Number of vehicles 20
- Rate of March 40mph
- Density 20 vehs per mile
- Break at CP1 15 minutes
- Start time 1400
- SP to CP1 40 mi
- CP1 to CP2 10 mi
- CP2 to RP 20 mi

DETERMINE

(Always round up when computing)

- PASS TIME
- TIME DISTANCE
 - SP to CP1
 - CP1 to CP2
 - CP2 to RP
- ETA/ETD

Q. How many elements is the convoy broken into?
A. One (no time gap)

Second Requirement: Convoy Calculations

GIVEN

- Number of vehicles 40
- Rate of March 40mph
- Density 20 vehs per mile
- **Time Gap 10 minutes**
- Break at CP1 20 minutes
- Start time 1300
- SP to CP1 60 mi
- CP1 to CP2 40 mi
- CP2 to CP3 60 mi
- CP3 to RP 20 mi

DETERMINE

(Always round up
when computing)

- PASS TIME
- TIME DISTANCE
- ETA/ETD

DD Form 1266

Request for Special Hauling Permit

- Completed by UMO or alternate UMO
- Forwarded in same channels as DD Form 1265
- Used to obtain special hauling permits for highway movement of oversize/overweight vehicles (as part of a convoy or separately)

OVER-DIMENSIONAL/OVER-WEIGHT VEHICLES

- Dimension and weight limitations vary from state to state (see Appendix E of FM 55-30)
- Check local rules and restrictions before any convoy movement
- Gross planning purposes - vehicles considered over-dimensional/over-weight if they exceed any one of the following dimensions/weight:

Width:	102 inches (8 feet, 6 inches)
Height:	162 inches (13 feet, 6 inches)
Length:	60 feet for semi-trailers
Weight:	20,000 pounds for single axle
	34,000 pounds for tandem axles
	80,000 pounds gross weight

FM 55-30 Appendix E

SUMMARY OF U.S. SIZE & WEIGHT LIMITS

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STATE	HEIGHT In Feet/ Inches	WIDTH In Inches	LIMITS FOR XXX						
			Tractor-Semitrailer Combinations				Twin Combinations		
			Truck (Single Unit)	Semitrailer Length on Interstate & National Network*	Semitrailer Length Off National Network*	Overall Combination Length on Other Roads	Semitrailer or Trailer on Interstate & National Network	Twin Combination Length on Other Roads	Straight Truck + Trailer
Alabama	13-6	102 ³	40-0	57 ⁷	53-6 ⁷	NR	28-6	28-6 ⁸	53-6
Alaska	14-0	102	40-0	48	45	70	95 ¹²	75	75
Arizona	14-0 ²	102 ³	40-0	57-6	53/NR ¹⁰	65 ¹⁰	28-6	NR	NR ²⁰

- Each state has specific regulations governing the use of its highways

North Carolina	13-6	102 ³	40-0 ⁶	53 ⁷	NR ¹⁷	60 ¹⁷	28	NP	60
North Dakota	14-0	102	50-0	53	53	75 ⁹ /88 ¹⁴	53 ⁹	75 ⁹ /88 ¹⁴	75 ⁹
Ohio	13-6	102	40-0	53	53	NR	28-6	NR	65

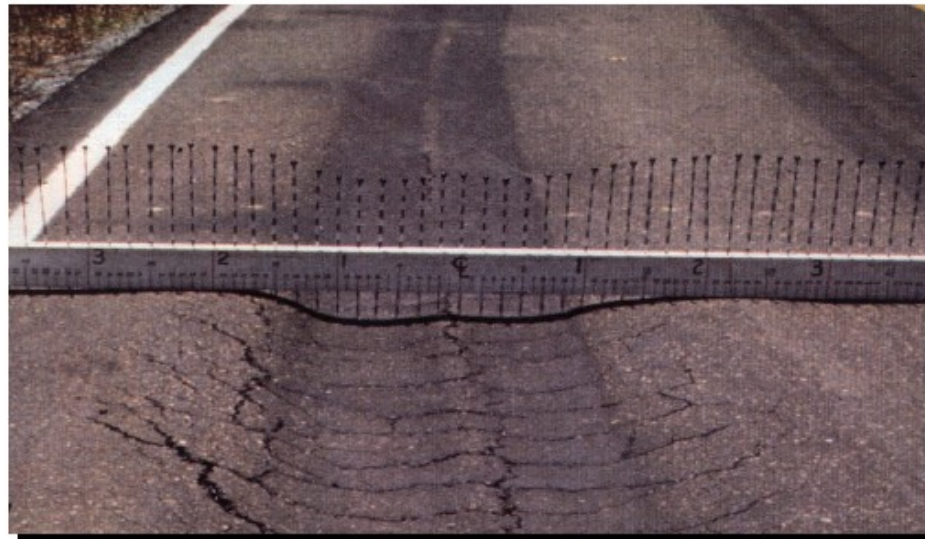
Tractor trailer that overloaded a bridge



Fatal accident when load was too high



Road damage from overweight vehicles



DD Form 1266

REQUEST FOR SPECIAL HAULING PERMIT		1. CONVOY NUMBER	2. UIC	3. DATE (YYYYMMDD)			
SECTION I - GENERAL							
4. ORGANIZATION	5. STATION	6. DATE OF MOVEMENT (YYYYMMDD)					
		a. STARTING b. COMPLETION					
7. POINT OF ORIGIN		8. DESTINATION					
9. ARRIVAL AT STATE LINES		10. ROUTING (Stipulate US Routes, State Routes, etc.)					
a. DATE (YYYYMMDD)	b. TIME	c. STATE LINE					
11. ESCORT REQUIREMENTS							
SECTION II - VEHICLE AND LOAD DATA							
DESCRIPTION a.	TYPE (2-ton, etc.) b.	NO. OF VEHICLES c.	REGISTRATION NUMBER d.	HEIGHT e.	WIDTH f.	LENGTH g.	WEIGHT h.
12. VEHICLE							
(1) TRUCK							(Empty)
(2) TRUCK-TRACTOR							(Empty)
(3) TRAILER							(Empty)
(4) SEMI-TRAILER							(Empty)
(5) OTHER (Specify)							(Empty)
13. LOAD							
14. OVERALL (Vehicle and load)							
15. DESCRIPTION OF LOAD (Brief general description: Organization impediments, etc.) (Within security limitations)							
16. LOAD OVERHANG							
a. FRONT	b. REAR	c. LEFT SIDE	d. RIGHT SIDE				

DD FORM 1266, SEP 1998 (EG)

PREVIOUS EDITION IS OBSOLETE.

Designed using PerformPro, WWS/DIOR, Sep 98

17. NUMBER OF AXLES	1	2	1						
	A	B	C	D	E	F	G	H	
	AXLE 1 a.	AXLE 2 b.	AXLE 3 c.	AXLE 4 d.	AXLE 5 e.	AXLE 6 f.	AXLE 7 g.	AXLE 8 h.	TOTAL i.
18. NUMBER OF TIRES									
19. TIRE WIDTH (Inches)									
20. TIRE SIZES									
21. AXLE LOAD (Empty)									
22. AXLE LOAD (Loaded)									
23. AXLE SPACING (See Item 17 for identification)	A SPACING	B SPACING	C SPACING	D SPACING	E SPACING	F SPACING	G SPACING	H SPACING	
24. REMARKS									
25. MOVEMENT BY HIGHWAY IS									
<input type="checkbox"/> ESSENTIAL TO NATIONAL DEFENSE <input type="checkbox"/> IN THE INTEREST OF NATIONAL DEFENSE									
26. REQUESTING AGENCY					27. APPROVING AGENCY				
28. REQUESTED BY					29. APPROVED BY				
a. NAME (Last, First, Middle Initial)					a. NAME (Last, First, Middle Initial)				
b. GRADE		c. TITLE			b. GRADE		c. TITLE		
d. SIGNATURE			e. DATE (YYYYMMDD)		d. SIGNATURE			e. DATE (YYYYMMDD)	
INSTRUCTIONS									
GENERAL:					SPECIFIC:				
DD Form 1266, "Request for Special Hauling Permit" will be used to obtain special hauling permits for the movement of over-size/overweight vehicles over public highways when accompanying a convoy or when traveling separately.					Item 12. a. b., c., and d. - Complete nomenclature of vehicles involved. More than one unit may be included, provided units are identical in equipment, load characteristics, routing and movement date. Total number of units shall be indicated prominently.				
This form, in duplicate and accompanied by letter of transmittal, will be forwarded through the local transportation officer so as to reach the appropriate headquarters not less than ten (10) working days prior to the starting date of the movement. Letters of transmittal will contain complete itinerary and explanation of the movement. One (1) letter of transmittal is sufficient when several DD Forms 1265 and 1266 involving one (1) movement are forwarded to the appropriate headquarters.					Item 12. e. - Note all units other than standard highway vehicles; road equipment, guns, etc.				
In cases where bona fide emergencies exist, the information contained in this form and DD Form 1265 may be transmitted to the appropriate headquarters by telephone or electronic transmission. In this event, reference will be made to item numbers in the sequence in which they appear on the forms. Items which do not apply will be so indicated.					Item 12. d. - Indicate the registration number for each unit or combination of units. Use additional page if required.				
					Item 17 - Indicate appropriate number of axles by inserting number in proper circles. Block out circles not applicable.				
					Item 24 - For movement through the District of Columbia, include name of manufacturer of equipment.				

DD FORM 1266 (BACK), SEP 1998

DD Form 1266 (Cont)

REQUEST FOR SPECIAL HAULING PERMIT	1. CONVOY NUMBER .	2. UIC WADSAA	3. DATE(YYYYMMDD) 0000/08/28
SECTION I - GENERAL			
4. ORGANIZATION	5. STATION	6. DATE OF MOVEMENT (YYYYMMDD)	

Block 1: Convoy Number (leave blank)

Block 2: UIC

Block 3: Date

DD Form 1266 (Cont)

SECTION I - GENERAL			
4. ORGANIZATION 100th Trans Co (Mdm Trk)	5. STATION Building 1234, Fort Eustis, VA 23604	6. DATE OF MOVEMENT (YYYYMMDD)	
		a. STARTING 0000/08/28	b. COMPLETION 0000/08/28
7. POINT OF ORIGIN	8. DESTINATION		

Block 4: Organization

Block 5: Station

Block 6: Date of Movement:

a. Starting b. Completion

DD Form 1266 (Cont)

7. POINT OF ORIGIN Ft Eustis, VA			8. DESTINATION CAMP A.P Hill, VA		
9. ARRIVAL AT STATE LINES			10. ROUTING <i>(Stipulate US Routes, State Routes, etc.)</i>		
N/A					
a. DATE (YYYYMMDD)	b. TIME	c. STATE LINE			
11. ESCORT REQUIREMENTS					

Block 7: Point of Origin

Block 8: Destination

Block 9: Arrival at State Lines:

a. Date b. Time c. State Line

DD Form 1266 (Cont)

7. POINT OF ORIGIN			8. DESTINATION		
Ft Eustis, VA			CAMP A.P Hill, VA		
9. ARRIVAL AT STATE LINES			10. ROUTING <i>(Stipulate US Routes, State Routes, etc.)</i>		
a. DATE (YYYYMMDD)	b. TIME	c. STATE LINE	Ft Eustis to I 64 N, S 168 N, S 33 N, I 95 S, S 301 W to Camp A. P. Hill		
11. ESCORT REQUIREMENTS					
2 ea M998 Trk Util Cgo/Tpr Carr (one front/one rear)					

SECTION II - VEHICLE AND LOAD DATA

Block 10: Routing

Block 11: Escort Requirements

DD Form 1266

(Cont)

Section II - Vehicle and Load Data

SECTION II - VEHICLE AND LOAD DATA							
DESCRIPTION a.	TYPE (2-ton, etc.) b.	NO. OF VEHICLES c.	REGISTRATION NUMBER d.	HEIGHT e.	WIDTH f.	LENGTH g.	WEIGHT h.
12. VEHICLE							
(1) TRUCK							(Empty)
(2) TRUCK-TRACTOR							(Empty)
(3) TRAILER							(Empty)
(4) SEMI-TRAILER							(Empty)
(5) OTHER (Specify)							(Empty)
13. LOAD							
14. OVERALL (Vehicle and load)							
15. DESCRIPTION OF LOAD (Brief general description: Organization impediments, etc.) (Within security limitations)							

DD Form 1266

(Cont)

Section II - Vehicle and Load Data

SECTION II - VEHICLE AND LOAD DATA							
DESCRIPTION a.	TYPE (2-ton, etc.) b.	NO. OF VEHICLES c.	REGISTRATION NUMBER d.	HEIGHT e.	WIDTH f.	LENGTH g.	WEIGHT h.
12. VEHICLE							
(1) TRUCK							(Empty)
(2) TRUCK-TRACTOR M915	25 ton						(Empty)
(3) TRAILER							(Empty)
(4) SEMI-TRAILER M872	34 ton						(Empty)
(5) OTHER (Specify)							(Empty)
13. LOAD							

Block 12 Vehicle - Columns

a: Description b: Type (eg, 2-Ton - see tables 2-7

to 2-14 in TB 55-46-1)

DD Form 1266 (Cont)

SECTION II - VEHICLE AND LOAD DATA							
DESCRIPTION a.	TYPE (2-ton, etc.) b.	NO. OF VEHICLES c.	REGISTRATION NUMBER d.	HEIGHT e.	WIDTH f.	LENGTH g.	WEIGHT h.
12. VEHICLE							
(1) TRUCK							(Empty)
(2) TRUCK-TRACTOR M915	25 ton	1	9T1234				(Empty)
(3) TRAILER							(Empty)
(4) SEMI-TRAILER M872	34 ton	1	8T9872				(Empty)
(5) OTHER (Specify)							(Empty)

Block 12: Vehicle - Columns

c. No. of Vehicles d. Registration No.

Ref: FORSCOM/ARNG Reg 55-1, pg. 61

DD Form 1266 (Cont)

SECTION II - VEHICLE AND LOAD DATA				INCHES			POUNDS
DESCRIPTION a.	TYPE (2-ton, etc.) b.	NO. OF VEHICLES c.	REGISTRATION NUMBER d.	HEIGHT e.	WIDTH f.	LENGTH g.	WEIGHT h.
12. VEHICLE				OPERATIONAL CONFIGURATION			
(1) TRUCK							(Empty)
(2) TRUCK-TRACTOR M915		1	1234	131	123	269	18,621
(3) TRAILER							(Empty)
(4) SEMI-TRAILER M872		1	9872	58/106	96	490	17,390
(5) OTHER (Specify)							(Empty)

Bed height

Overall height

Block 12: Vehicle - Columns

e. Height f. Width g. Length h. Weight

Ref: FORSCOM/ARNG Reg 55-1, pg. 61

DD Form 1266 (Cont)

SECTION II - VEHICLE AND LOAD DATA							
DESCRIPTION a.	TYPE (2-ton, etc.) b.	NO. OF VEHICLES c.	REGISTRATION NUMBER d.	HEIGHT e.	WIDTH f.	LENGTH g.	WEIGHT h.
(Specify)							
13. LOAD MILVAN				149	96	242	30,000
14. OVERALL (Vehicle and load)							
15. DESCRIPTION OF LOAD (Brief general description: Organization impediments, etc.) (Within security limitations)							

Line 13: Load (determine if in reduced/operational configuration)
e. Height, f. Width, g. Length, h. Weight

DD Form 1266 (Cont)

SECTION II - VEHICLE AND LOAD DATA							
DESCRIPTION a.	TYPE (2-ton, etc.) b.	NO. OF VEHICLES c.	REGISTRATION NUMBER d.	HEIGHT e.	WIDTH f.	LENGTH g.	WEIGHT h.
12. VEHICLE							
13. LOAD MILVAN				149	96	242	30,000
14. OVERALL (Vehicle and load)				207	12	659	66,011
15. DESCRIPTION OF LOAD (Brief general description: Organization impediments, etc.) (Within security limitations)							

Line 14: Overall (Vehicle and Load) --
e. Height, f. Width g. Length, h. Weight

Determining Overall Length

Outsized/Overweight Vehicle

NOTE: The Union for combinations can be found in TB 55-46-1, Appendix C, but if the combination cannot be found, subtract 100 inches from the total length of the truck-tractor and the semi-trailer to account for the coupling overlap while connected.



DD Form 1266 (Cont)

15. DESCRIPTION OF LOAD *(Brief general description: Organization impediments, etc.) (Within security limitations)*

One MILVAN

Block 15: Description of Load (a brief general description within security limitations)

Ref: FORSCOM/ARNG Reg 55-1, pg. 61

DD Form 1266 (Cont)

16. LOAD OVERHANG

a. FRONT

NA

b. REAR

NA

c. LEFT SIDE

NA

d. RIGHT SIDE

NA

DD FORM 1266, SEP 1998 (EG)

PREVIOUS EDITION IS OBSOLETE.

Designed using Perform Pro, WHS/DIOR, Sep 98

Block 16: Load Overhang

a. Front b. Rear c. Left Side d. Right Side

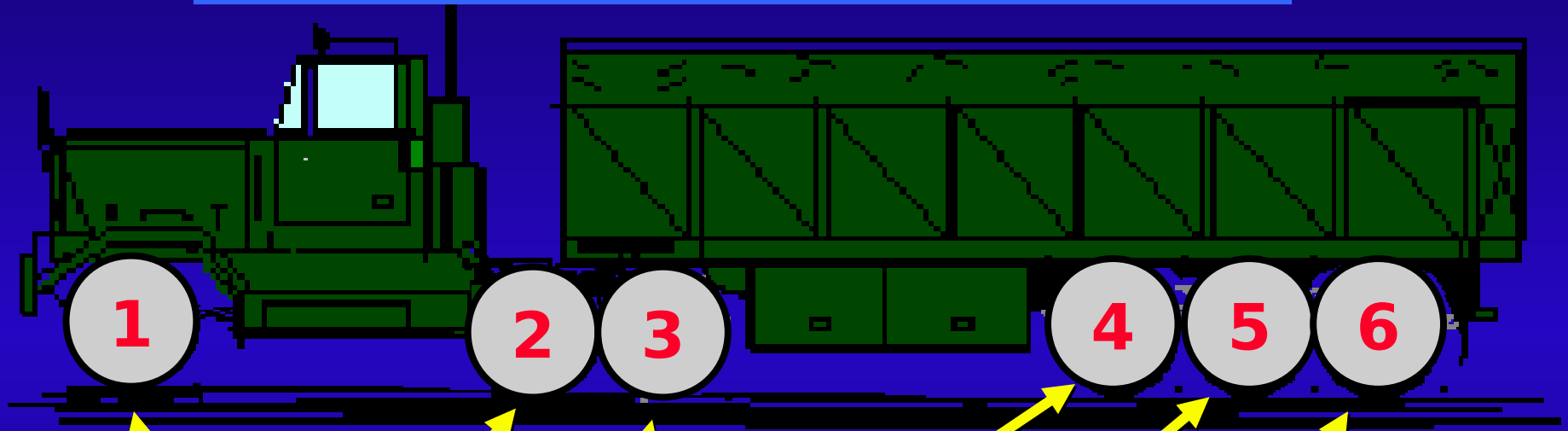
DD Form 1266 -- Back

17. NUMBER OF AXLES	<input type="radio"/> 1 A	<input type="radio"/> 2 B	<input type="radio"/> 3 C	<input type="radio"/> 4 D	<input type="radio"/> 5 E	<input type="radio"/> 6 F	<input type="radio"/> 7 G	<input type="radio"/> 8 H	
	AXLE 1 a.	AXLE 2 b.	AXLE 3 c.	AXLE 4 d.	AXLE 5 e.	AXLE 6 f.	AXLE 7 g.	AXLE 8 h.	TOTAL i.
18. NUMBER OF TIRES									
19. TIRE WIDTH (Inches)									
20. TIRE SIZES									
21. AXLE LOAD (Empty)									
22. AXLE LOAD (Loaded)									
23. AXLE SPACING (See Item 17 for identification)	A SPACING	B SPACING	C SPACING	D SPACING	E SPACING	F SPACING	G SPACING	H SPACING	

Lines 17 to 23
with
associated
columns a. to
i.

DD Form 1266

-- Back (Cont)



17. NUMBER OF AXLES	1	2	3	4	5	6	
	A	B	C	D	E	F	G
	AXLE 1 a.	AXLE 2 b.	AXLE 3 c.	AXLE 4 d.	AXLE 5 e.	AXLE 6 f.	AXLE 7 g.

Block 17: Axle Numbers correspond to columns

Ref: FORSCOM/ARNG Reg 55-1, pg. 61

DD Form 1266

-- Back (Cont)

Block

Block

Number
of Tires

Block 20:
Tire Sizes

(Inches)

1
8
9
:
W
i
d
t
h

17. NUMBER OF AXLES	1 A	2 B	3 C	4 D	5 E	6 F			
	AXLE 1 a.	AXLE 2 b.	AXLE 3 c.	AXLE 4 d.	AXLE 5 e.	AXLE 6 f.	AXLE 7 g.	AXLE 8 h.	TOTAL i.
18. NUMBER OF TIRES	2	4	4	4	4	4			
19. TIRE WIDTH (Inches)	22	44	44	44	44	44			
20. TIRE SIZES	11 x20	11 x20	11 x20	11 x20	11 x20	11 x20			
21. AXLE LOAD (Empty)									
22. AXLE LOAD (Loaded)									
23. AXLE SPACING (See Item 17 for identification)	A SPACING	B SPACING	C SPACING	D SPACING	E SPACING	F SPACING	G SPACING	H SPACING	
24. REMARKS									

DD Form 1266

-- Back (Cont)

17. NUMBER OF AXLES	1 A	2 B	3 C	4 D	5 E	6 F	G	H	
	AXLE 1 a.	AXLE 2 b.	AXLE 3 c.	AXLE 4 d.	AXLE 5 e.	AXLE 6 f.	AXLE 7 g.	AXLE 8 h.	TOTAL i.
18. NUMBER OF TIRES	2	4	4	4	4	4			22
19. TIRE WIDTH (Inches)	22	44	44	44	44	44			242
20. TIRE SIZES	11 x20	11 x20	11 x20	11 x20	11 x20	11 x20			
21. AXLE LOAD (Empty)	Weight of prime mover + trailer ▶ 36011								
22. AXLE LOAD (Loaded)	Weight of prime mover + trailer + load ▶ 66011								
23. AXLE SPACING (See Item 17 for identification)	A SPACING	B SPACING	C SPACING	D SPACING	E SPACING	F SPACING	G SPACING	H SPACING	
24. REMARKS									

Line 18 i
Line

Line 19 i
Line

Line 21 i
Line

Line 22 i
Line

Table N-1, FM 55-30

Percentages for axle weight distribution

Number of Axles per Vehicle	Type of Vehicle	Axle 1	Axle 2	Axle 3	Axle 4	Axle 5	Axle 6
3	1-1/4ton	.38	.31	.31			
	2-1/2ton	.32	.34	.34			
	Truck-tractor + semi-trailer on	.26	.37	.37			
	10 ton	.24	.38	.38			
5	Semitrailer	.14	.21	.21	.22	.22	
6	Semitrailer	.08	.22	.22	.16	.16	

DD Form 1266

-- Back (Cont)

Block 21:
Axle

Block 22:
Axle
(Empty)

L
o
a
d
L
o
a
d

17. NUMBER OF AXLES	1 A	2 B	3 C	4 D	5 E	6 F	G	H	
	AXLE 1 a.	AXLE 2 b.	AXLE 3 c.	AXLE 4 d.	AXLE 5 e.	AXLE 6 f.	AXLE 7 g.	AXLE 8 h.	TOTAL i.
18. NUMBER OF TIRES	2	4	4	4	4	4			22
19. TIRE WIDTH (Inches)	22	44	44	44	44	44			242
20. TIRE SIZES	1100 x20	1100 x20	1100 x20	1100 x20	1100 x20	1100 x20			
21. AXLE LOAD (Empty)	2881	7922	7922	5762	5762	5762		=	36011
22. AXLE LOAD (Loaded)	5281	14522	1452	10562	10562	10562		=	66011
23. AXLE SPACING (See Item 17 for identification)	A SPACING	B SPACING	C SPACING 2	D SPACING	E SPACING	F SPACING	G SPACING	H SPACING	
24. REMARKS									

DD Form 1266

-- Back (Cont)

Block 23:
Axle
Spacing

17. NUMBER OF AXLES	1 A	2 B	3 C	4 D	5 E	6 F	G	H	
	AXLE 1 a.	AXLE 2 b.	AXLE 3 c.	AXLE 4 d.	AXLE 5 e.	AXLE 6 f.	AXLE 7 g.	AXLE 8 h.	TOTAL i.
18. NUMBER OF TIRES	2	4	4	4	4	4			22
19. TIRE WIDTH (Inches)	22	44	44	44	44	44			242
20. TIRE SIZES	11 x20	11 x20	11 x20	11 x20	11 x20	11 x20			
21. AXLE LOAD (Empty)	2881	7922	7922	5672	5672	5672			36011
22. AXLE LOAD (Loaded)	5281	14522	1452	10562	10562	10562			66011
23. AXLE SPACING (See Item 17 for identification)	A SPACING 98	B SPACING 48	C SPACING 100	D SPACING 48	E SPACING 48	F SPACING	G SPACING	H SPACING	
24. REMARKS									

DD Form 1266

-- Back (Cont)

24. REMARKS

25. MOVEMENT BY HIGHWAY IS

☐ ESSENTIAL TO NATIONAL DEFENSE

☐ IN THE INTEREST OF NATIONAL DEFENSE

26. REQUESTING AGENCY

27. APPROVING AGENCY

Block 24: Remarks

DD Form 1266

-- Back (Cont)

24. REMARKS	
25. MOVEMENT BY HIGHWAY IS	
<input type="checkbox"/> ESSENTIAL TO NATIONAL DEFENSE	<input type="checkbox"/> IN THE INTEREST OF NATIONAL DEFENSE
26. REQUESTING AGENCY	27. APPROVING AGENCY

Block 25: Movement by Highway is:

(check one)

- ☒ Essential to National Defense
- ☒ In the Interest of National Defense

DD Form 1266

-- Back (Cont)

Blocks
26 & 28
Requesting
Agency

26. REQUESTING AGENCY 100th Trans Co (Mdm Trk)		27. APPROVING AGENCY DMC or ITO/UMC	
28. REQUESTED BY		29. APPROVED BY	
a. NAME (Last, First, Middle Initial)		a. NAME (Last, First, Middle Initial)	
b. GRADE	c. TITLE	b. GRADE	c. TITLE
d. SIGNATURE		d. SIGNATURE	
e. DATE (YYYYMMDD)		e. DATE (YYYYMMDD)	
INSTRUCTIONS			
GENERAL: DD Form 1266, "Request for Special Hauling Permit" will be used to obtain special hauling permits for the movement of size/overweight vehicles over public highways. This form, in duplicate and accompanied by a letter of transmittal, will be forwarded through the local transportation authority to reach the appropriate headquarters not less than ten (10) working days prior to the starting date of the movement. Letters of transmittal will contain complete itinerary and explanation of the movement. One (1) letter of transmittal is sufficient when several DD Forms 1265 and 1266 involving one (1) movement are forwarded to the appropriate headquarters. In cases where bona-fide emergencies exist, the information contained in this form and DD Form 1265 may be transmitted to the appropriate headquarters by telephone or electronic transmission. In this event, reference will be made to item numbers in the sequence in which they appear on the forms. Items which do not apply will be so indicated.		SPECIFIC: Complete nomenclature of vehicles may be included, provided units are characteristics, routing and movement will be indicated prominently. Item 12.e. - Include all units other than standard highway vehicles; road equipment, guns, etc. Item 12.d. - Indicate the registration number for each unit or combination of units. Use additional page if required. Item 17 - Indicate appropriate number of axles by inserting number in proper circles. Block out circles not applicable. Item 24 - For movement through the District of Columbia, include name of manufacturer of equipment.	

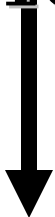
DD FORM 1266 (BACK), SEP 1998

Blocks
27 & 29:
Approving
Agency

Instructions

TRUCK-TRACTOR

M 1070

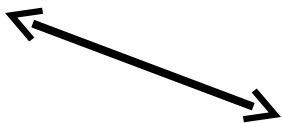


SEMI-TRAILER

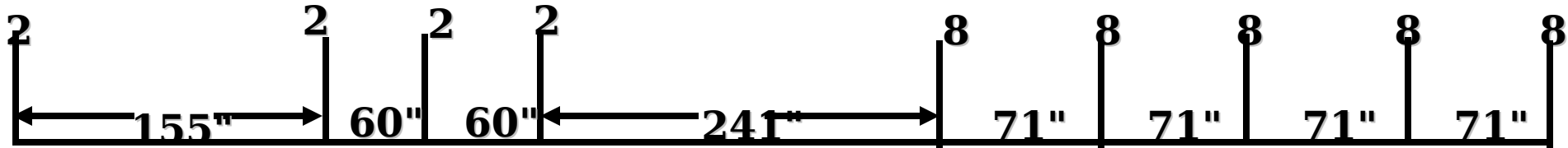
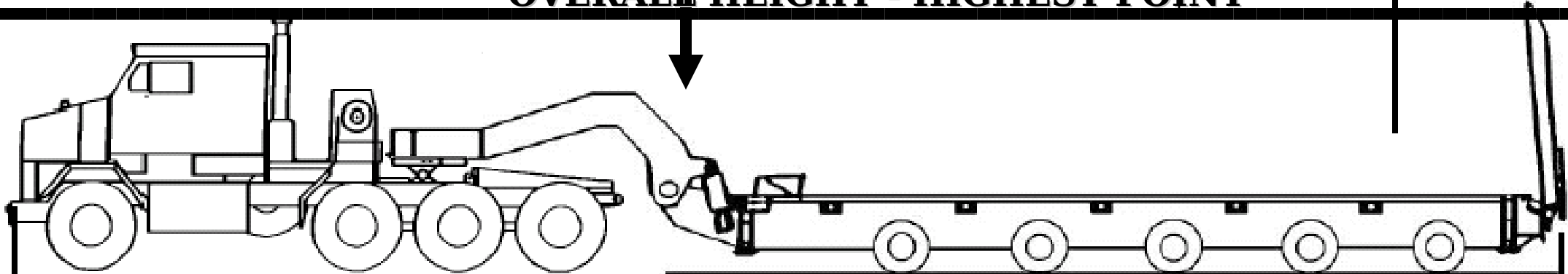
M 1000



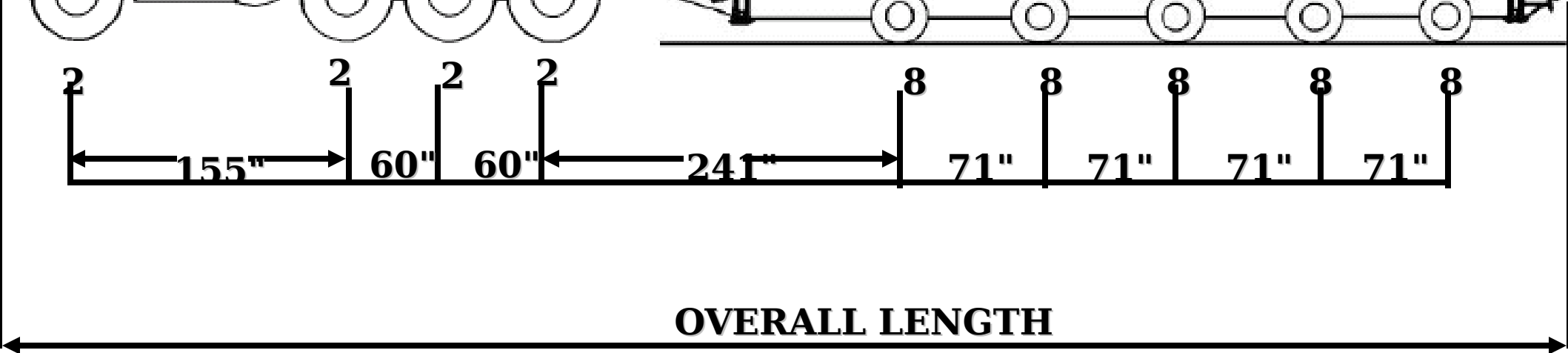
**OVERALL WIDTH
WIDEST POINT**



OVERALL HEIGHT - HIGHEST POINT



OVERALL LENGTH



DD Form 1266 (Cont)

SECTION II - VEHICLE AND LOAD

DESCRIPTION a.	DATA (2-ton, etc) b.	NO. OF VEHICLES c.	REGISTRATION NUMBER d.	HEIGHT e.	WIDTH f.	LENGTH g.	WEIGHT h.
12. VEHICLE							
(1) TRUCK							(Empty)
(2) TRUCK-TRACTOR							(Empty)
(3) TRAILER	M1070 HET	1	0134	141	144	362	40999
(4) SEMI-TRAILER							(Empty)
(5) OTHER (Specify)	M1070 TON	1	4444T	43/124	144	622	50400
13. LOAD							(Empty)
14. OVERALL	NONE						
				141	144	859	91399

DD Form 1266 (Cont)

17. NUMBER OF AXLES	1 A	2 B	3 C	4 D	5 E	6 F	7 G	8/9 H	
	AXLE 1 a.	AXLE 2 b.	AXLE 3 c.	AXLE 4 d.	AXLE 5 e.	AXLE 6 f.	AXLE 7 g.	AXLE 8 h.	TOTAL i.
18. NUMBER OF TIRES	2	8	2	2	2	8		8	48
19. TIRE WIDTH	34.4	34.4	34.4	34.4	34.4	53.6		53.6	405.6
(Inches)	53.6	53.6/53.6	53.6	53.6	53.6	53.6		53.6	
20. TIRE SIZES	17.2x20 6.7x17.5	17.2x20 6.7x17.5	17.2x20 6.7x17.5	17.2x20 6.7x17.5	17.2x20 6.7x17.5	17.2x20 6.7x17.5	17.2x20 6.7x17.5		
21. AXLE LOAD (Empty)	18,468	9,106	9,167	9,159	9,100	9,100	9,100	9,100	91,399
22. AXLE LOAD (Loaded)									NA
23. AXLE SPACING	A SPACING	B SPACING	C SPACING	D SPACING	E SPACING	F SPACING	G SPACING	H SPACING	
(See item 17 for identification)	155 71	60 71	60	60	241	71	71		

TRUCK-TRACTOR

M 916A2 SEMI-TRAILER

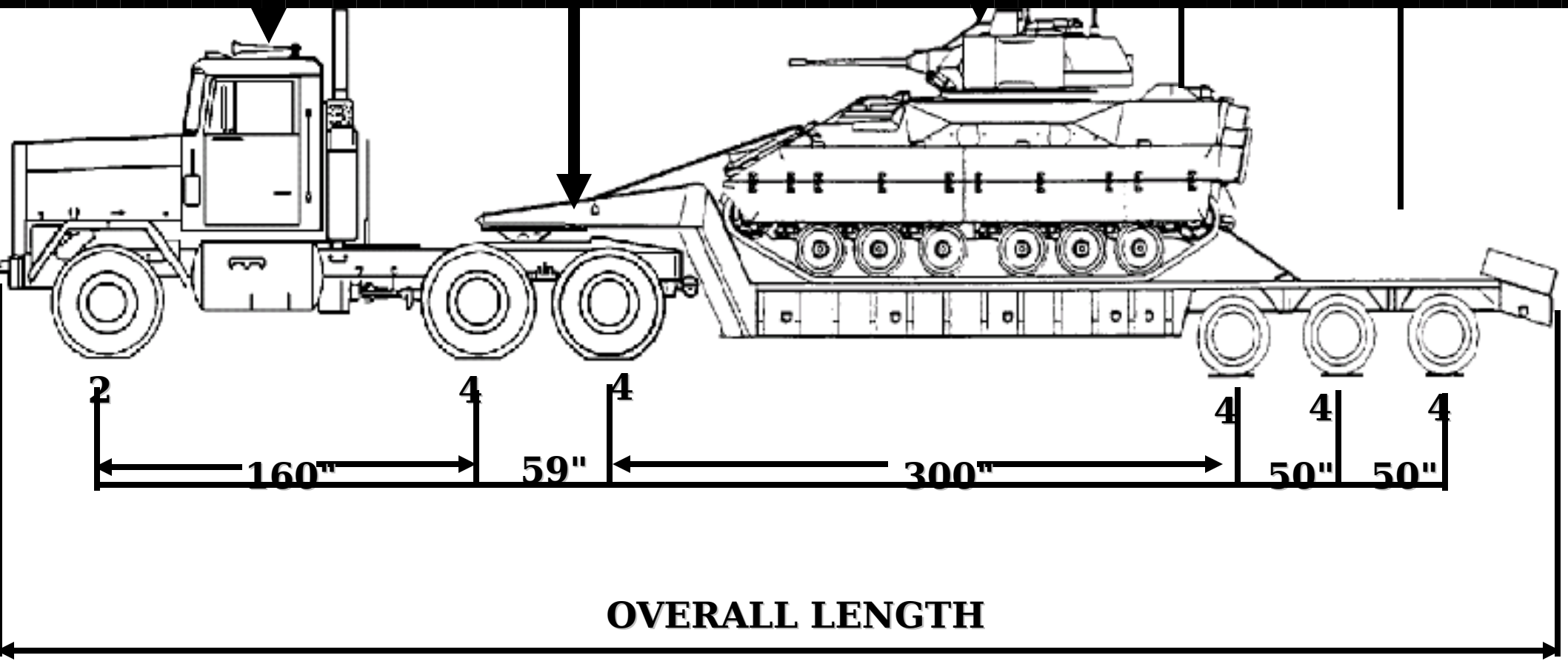
LOAD

M 2

**OVERALL WIDTH
WIDEST POINT**

M 870A1

OVERALL HEIGHT - HIGHEST POINT



OVERALL LENGTH

Third Requirement: Prepare DD Form 1266

GIVEN

- M916A2 6x6 (operational)
 - M870A1 40-Ton (operational)
- LOAD : M2 (reduced)

- Registration number:
M916A2 (#1234)
M870A1 (#9876)

No. of Tires per Axle
M916A2 - 2, 4, 4
M870A1 - 4 (all axles)

GIVEN

Tire Size: M916A2
(11x22.5)

M870A1 (10x15)

Tire Width: M916A2 = 11"
M870A1 =
10"

Axle Spacing: 160, 59, 300,
50, 50

Solution To Third Requirement

SECTION II - VEHICLE AND LOAD							
DESCRIPTION a.	DATA (2-ton, etc) b.	NO. OF VEHICLES c.	REGISTRATION NUMBER N	HEIGHT e.	WIDTH f.	LENGTH g.	WEIGHT h.
12. VEHICLE							
(1) TRUCK							(Empty)
(2) TRUCK-TRACTOR M916A2	6x6	1	#1234	128	124	289	27,860
(3) TRAILER							(Empty)
(4) SEMI-TRAILER							(Empty)
(5) OTHER (Spec M870A1)	40-Ton	1	#9876	40 85	126	515	19,180
13. LOAD							(Empty)
14. OVERALL (Vehicle and M2)				104	117	258	40,940
				144	126	704	87,980

Solution To Third Requirement (cont)

17. NUMBER OF AXLES	1 A	2 B	3 C	4 D	5 E	6 F	7 G	8 H	
	AXLE 1 a.	AXLE 2 b.	AXLE 3 c.	AXLE 4 d.	AXLE 5 e.	AXLE 6 f.	AXLE 7 g.	AXLE 8 h.	TOTAL i.
18. NUMBER OF TIRES	2	4		4	4	4		4	22
19. TIRE WIDTH	22	44		44	40	40		40	230
20. TIRE SIZES (Inches)	11x22.5	11x22.5	11x22.5	10x15	10x15	10x15			
21. AXLE LOAD (Empty)	3,763	10,349	10,349	7,526	7,526	7,527			47,040
22. AXLE LOAD (Loaded)	7,038	19,356	19,356	14,077	14,077	14,076			87,980
23. AXLE SPACING (See item 17 for identification)	A SPACING 160	B SPACING 59	C SPACING 300	D SPACING 50	E SPACING 50	F SPACING	G SPACING	H SPACING	

A large, dark-hulled ship with four tall, light-colored masts is docked. The deck is cluttered with various pieces of equipment, including what appear to be missile launchers or large gun mounts. The ship's name, "ORION", is visible on the side of the hull. The background is a clear blue sky.

PRACTICAL EXERCISE

SUMMARY





On
Learnin
g

A wooden-framed chalkboard with a black surface. The text "Let's Review" is written in a large, yellow, sans-serif font. The chalkboard is set against a solid blue background. The frame is made of light brown wood with a visible grain. There are some small, dark marks on the bottom edge of the chalkboard, possibly from erasing.

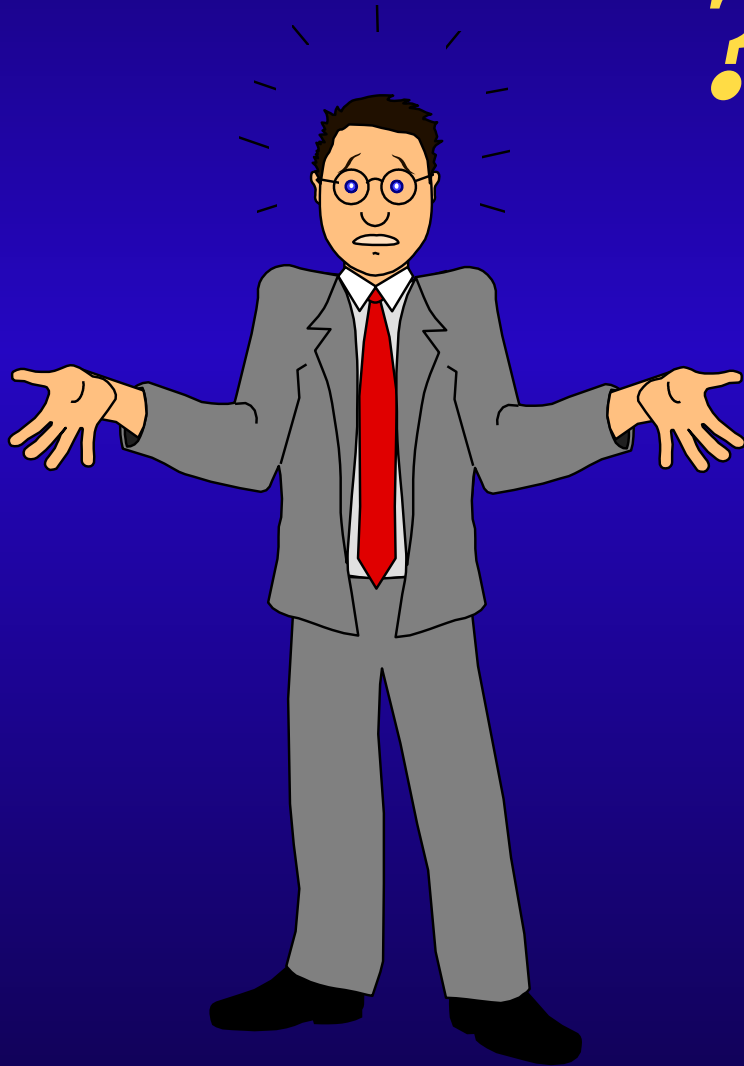
Let's
Review



On
Review

QUESTIONS

???



What's Coming